

# Lake Borgne Shoreline Protection at Bayou Dupre (PO-31)

## **Project Status**

Approved Date: 2002Cost:\$11.9 millionProject Area:98 acresStatus:EngineeringNet Benefit After 20 Years:83 acresand Design

**Project Type:** Shoreline Protection

## Location

The project is located in the Pontchartrain Basin on the southwest shoreline of Lake Borgne in St. Bernard Parish, Louisiana.

### **Problems**

The narrow strip of marsh between Lake Borgne and the Mississippi River Gulf Outlet (MRGO) in the vicinity of Bayou Dupre is disappearing. An opening between the lake and MRGO is approximately 550 feet wide, and the shoreline erosion rate in the area has been estimated to be about 10 feet per year. At this rate, the opening at Bayou Dupre will be 2,300 feet in 20 years, and interior marsh loss is likely to only accelerate this process. This project is necessary to restore and maintain the narrow strip of land that remains between Lake Borgne and MRGO. The project would address the problem by creating marsh that would protect the Lake Borgne shoreline.

## **Restoration Strategy**

The project's objectives include: preventing and reducing Lake Borgne shoreline retreat in the area adjacent to Bayou Dupre to mitigate further joining of the lake and MRGO; reestablishing a sustainable lake rim; preventing or reducing conversion of emergent marsh to open water; and creating a suitable area for the beneficial use of dredged material removed from MRGO.

Continuous nearshore rock breakwaters will be constructed 1.2 miles to the east and 1.6 miles to the west of Bayou Dupre. The breakwaters will tie into those already present along the north bank of MRGO and extend into the lake to the 2-foot contour depth line. There will be openings in the breakwaters at a minimum of every 1,000 feet, and offset breakwaters will be built in front of these openings.



Fort Proctor, an old Civil War fortification, is a unique historical element that will be protected by this project.



A narrow, deteriorating strip of marsh separates MRGO (left side of picture) and Lake Borgne (upper right). The community of Shell Beach, just out of view to the left, is becoming increasingly vulnerable as land loss continues.

## **Progress to Date**

This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting. It is included as part of Priority Project List 11.

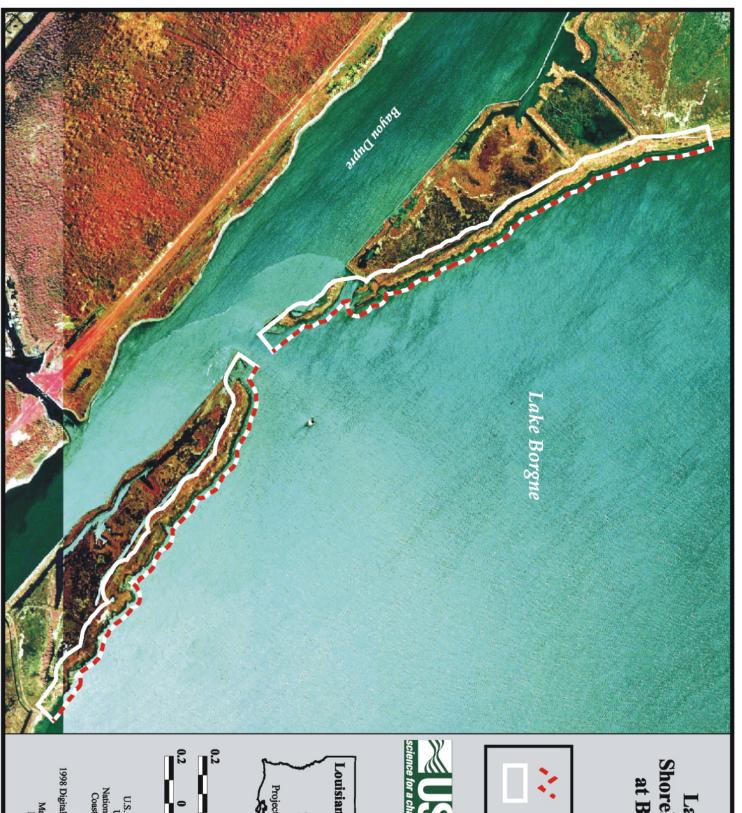
For more project information, please contact:



#### Federal Sponsor: U.S. Environmental Protection Agency Baton Rouge, LA (214) 665-6722



#### **Local Sponsor:** Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



## **Shoreline Protection** at Bayou Dupre (PO-31) Lake Borgne

**Shoreline Protection** 

**Project Boundary** 











Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

0.4 Kilometers

0.2 Miles

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangles Map Date: March 10, 2002 Map ID: 2002-11-219